\$8.6 million C&D Canal dredging project unclogs route for ship traffic

Army Corps-port partnership removes navigation impediments in upper bay



The 450-feet-wide C&D Canal carries 40 percent of all ship... (USACE, Baltimore Sun)
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The Army Corps of Engineers expects to lift navigational restrictions on the Chesapeake and Delaware Canal this week after emergency dredging removed shoaling that emerged in November.

At 14 miles long and 450 feet wide, the canal is a major artery for the port of Baltimore, carrying more than 40

percent of the port's shipping traffic: roll-on, roll-off cargo, cars, fuel and coal.

So when an approach to the canal becomes clogged with muck that threatens to imperil as many as 50 ships that regularly make deliveries to Baltimore — as happened to the access from the Chesapeake Bay — the folks who maintain the canal will make the earth move to restore circulation.

Over the last two months, that's what they did, dredging nearly 750,000 cubic yards of muck, a mound as big as a stack of 562.5 billion \$1 bills or enough to fill 64,000 railroad cars.

But even before that, they had to come up with the money and a place to put all that mud. In what maritime officials call a unique solution, the Army Corps of Engineers offices in Baltimore and Philadelphia pooled \$8.6 million and the Maryland Port Administration provided an approved fill site in the bay.

"Because of the importance of the canal and the importance of the port, everybody came together and did so very quickly," said Timothy Kelly, canal manager for the Army Corps.

The canal, built in the 1820s and upgraded several times, connects the bay to the Delaware River. The approaches, which tie into the bay's main shipping channels, need routine maintenance to clear sediment that settles and creates shoals. That task falls to the Army Corps' Philadelphia office, which operates the canal.

Late last fall, the Corps' Philadelphia engineers issued a safety warning to mariners that the depth of the bayside approach, normally 35 feet, had shrunk to 31 feet. The warning included a suggestion that vessel operators time their arrival at Chesapeake City in Cecil County to take advantage of high tide in the areas with shoals.

"They could get through on high tide, but it's a tight squeeze," said Frank Hamons, deputy director of the Maryland Port Administration.

Using the Chesapeake Bay as an alternate route extends a trip by 286 miles.

"That takes time and more fuel that add significant costs," Kelly said.

Officials speculate that runoff from intense storms over the last 18 months accelerated shoaling. The problem was exacerbated by two factors. First, the amount of federal money for dredging hasn't kept pace with costs. But equally important, approved places to dump dredged material have been filling up, and finding new places that can stand up to environmental review is costly and time consuming.

In 1966, Congress established the Harbor Maintenance Trust Fund, financed by a fee on cargo coming into ports and harbors, to pay for dredging all federal channels and waterways.

But figures released by the Government Accountability Office show that since 2003, the fund has taken in \$6.4 billion more than it has spent on harbor maintenance. Money is being diverted to help alleviate shortfalls in the rest of the federal budget, and legislative attempts to stop the practice have failed.

"The operation and maintenance of the canal is 100 percent funded by the federal government," Kelly said. "We try to dredge annually, but there are budget constraints and other needs. We have a budget of \$17 million this cycle, but out of that we also have to pay for the maintenance of the five high-level bridges that span the canal."

For the C&D project, the Corps' Philadelphia office paid \$7.1 million and the Baltimore office paid \$1.5 million to dredge and haul the material 45 miles to Poplar Island, a site owned by the Maryland Port Administration that is used by Baltimore Harbor and shipping channel dredgers.

While improvisation solved the short-term shoaling problem, it left officials to grapple with what to do next time. Dredging the canal and its approaches creates about 1.6 million cubic yards of material annually.

The Corps of Engineers has been without a dredge site since the end of 2010, when its site at Pooles Island near Middle River closed. Pearce Creek, an abandoned sand and gravel pit owned by the Corps between the Bohemia and Sassafras rivers, is the best replacement option, Kelly said.

At 260 acres, it has about 25 years of life left and is 16 miles away from the dredging area, he said.

But the Pearce Creek site is believed to have groundwater quality problems and has been opposed by residents. A U.S. Geological Survey study is due out soon, and the Maryland Department of the Environment is expected to review it and issue recommendations.

Another potential site south of Chesapeake City called Courthouse Point is 31 miles away. It has a much shorter life span and, because of the distance, would cost \$1 million more to use each year.

Kathy Broadwater, the Maryland port's deputy executive director, said the canal is being surveyed this week to confirm it is back to its proper depth. A new notice will be sent to mariners, she said, "and we'll have things back to normal."

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